Minnehaha County
Regulation of On-Site Wastewater Treatment Systems (Amendment)
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Health Ordinance
Adopted 1991
ORDINANCE MC13-89

AN ORDINANCE FOR THE REGULATION OF ON-SITE WASTEWATER TREATMENT SYSTEMS BE IT ORDAINED BY MINNEHAHA COUNTY AS FOLLOWS:

Section 101. Definitions.
For the purpose of this ordinance, the following terms and words are hereby defined, unless the context otherwise requires. The word "shall" is mandatory and not discretionary.

(1) AWWA Standards: Standards developed by American Water Works Association (AWWA) governing the use of materials, construction, and testing of sewer lines.

(2) Absorption bed: A subsurface absorption system which consists of excavations wider than 3 feet each, contained a minimum depth of 12 inches of clean aggregate, together with a system of absorption lines, through which effluent may seep or leach into the surrounding soils.

(3) Absorption field: The soil or soils through which wastewater from an absorption system percolates.

(4) Absorption line: A perforated or open jointed pipe that is installed in a covered trench or bed for the purpose of distributing wastewater to the surrounding soils through the perforations or the spaces between sections of the pipe.

(5) Absorption system: A system which utilizes absorption lines in trenches or beds to distribute wastewater to adjacent soils in an absorption field.

(6) Absorption trench: A long, narrow excavation made in soil for the placement of an absorption line.

(7) Adequate wastewater treatment: The dispersal of wastewater in a manner which does not cause pollution of ground or surface waters or create a public health problem or odors.

(8) Aerobic wastewater treatment system: A method of wastewater treatment utilizing the principle of oxidation in the biological decomposition of wastewater by either introducing air into the wastewater or allowing surface absorption of air into the wastewater.

(9) Building or facility sewer: That part of a drainage system extending from a building or facility which conveys wastes discharged from the building or facility to a public or individual

wastewater treatment system.

(10) Cess pool: A covered underground receptacle which receives untreated domestic wastewater and permits the untreated domestic wastewater to seep into surrounding soils.

(l1) Cistern: A watertight underground receptacle of nontoxic rnaterial designed for the storage of potable water.

(12) Conventiona1 individual on-site wastewater system: An individual on-site wastewaters ystem composed of a septic tank followed by an absorption system.

(l3) Distribution box. A watertight chamber below the outlet level of a septic tank or pretreatment unit from which effluent is distributed evenly to various portions of an absorption system.

(14) Domestic wastewater or domestic sewage: Waste other than industrial wastes, derived from premises such as houses, trailer courts, commercial buildings and institutions.

(15) Dosing chamber: A tank that stores pretreated wastewater for periodic pressurized discharges to mounds or absorption fields.

(16) Effluent: The partially or completely treated liquid waste discharge from a wastewater treatment system.

(17) Evapotranspiration system: An imperviously lined dispersal system that uses a process of evaporation and plant transpiration to withdraw water from the soil.

(18) Experimental system: A new device or design which needs furher testing to provide information before approval.

(19) Gray water: The wastewater generated by water-using fixtures and appliances which do not discharge garbage or urinary or fecal wastes.

(20) Gray-water system: A wastewater system designed to recycle or treat wastes from sinks, lavatories, tubs, showers, washers, or other devices which do not discharge garbage or urinary or fecal wastes.

(21) Grease interceptor: An outdoor unit similar to the septic tank, used to remove excessive amounts of grease and oils, by flotation, that may interfere with subsequent ttreatment of the waste.

(22) Ground-water table: The upper surface of a ground-water aquifer in the zone of saturation of a gelogic formation.

(23) Holiding tank: A watertight, covered receptacle which is designed to receive and store the discahrge of domestic wastewater and is accessible for periodic removal of its content.

(24) Incinerator toilet: A waste disposal system which uses natural gase, propane, or electricity to incinerate wastes.

(25) Incorpoiraiton: The mixing of septage with the top soild by measn of discing, moldboard plowing, or chisel plowing to a minimum depth of 6 inches.

(26) Individual on-site wastewater system: A system or facility for treating, neutralizing, stabilizing, or dispersing wastes from one source.

(27) Installer: One who supervises and/or sets up for use or service, a wastewater system.

(28) Invert elevation: The lowest portion of the inside of any horizontal pipe.

(29) Mechanical wastewater treatment plants: Aerobic systems and package treatment plants.

(30) Mottling: The spots or blotches of a different color or shades of color interspersed with the dominant color of the soil that usually indicate that the soil is seasonally saturated.

(31) Nodak system or mound system: A shallow wastewater dispersal system constructed partially above ground which uses plant transpiration and soil absorption for final treatment of wastes.

(32) On-site wastewater system: A system designed to contain, distribute, or treat wastewater on or near the location where the wastewater is generated.. including sewers, septic tanks, absorption fields, Nodak systems, seepage pits, vault privies, holding tanks, subsurface sand filters, gray water systems, pumping stations, dosing chambers and related equipment.

(33) Package treatment plants: small or scaled-down versions of municipal wastewater treatment works which are generally assembled and shipped as complete mechanical units by the manufacturer.

(34) Percolation test: A soil test at the depth of a proposed absorption system to determine the water absorption capability of the soil, the results of which are normally expressed as the rate at which one inch of water is absorbed over an interval of time.

(35) Pit privy: A structure which allows for disposal of human excreta into a pit in the soil where a portion of the waste is dispersed by seepage into the surrounding soil

(36) Planning Director: That person appointed by the Board of County Commissioners to supervise the activities of the Planning Department and specifically empowered to enforce this

ordinance.

(37) Plastic limit: The soil condition at which soil can easily be rolled into a wire or thread 1/8 inch in diameter.

(38) Potable water: Waste that does not contain objectionable pollution, contamination, minerals, or infective agents and is considered satisfactory for domestic consumption.

(39) Private water system: A water supply system that provides waster for human consumption to fewer than 15 service connections that

regularly serves fewer than 25 individuals, or that serves 25 or more individuals for no more than 60 days per year.

(40) Public wastewater system: A facility for the treatment of wastewater owned by the state or any of its political subdivisions, including sanitary districts.

(41) Receptacle: A tank basin, cistern, grease interceptor or reservoir for the containment of water or wastes or both.

(42) Sand: A soil texture composed by weight of at least 25 percent of very course, coarse, and medium sand varying in size from 2.0 to 0.25 millimeters, less than 50 percent of fine or very fine sand varying in size from 0.25 to 0.05 millimeters, and not more than 10 percent of particles smaller than 0.05 millimeters.

(43) Seasonal high ground-water table: The highest elevation or level to which a soil is saturated for a week or more as observed as a free water surface in an unlined hole or to which it has been previously saturated as indicated by mottling, which is higher.

(44) Sedimentation tank: A watertight basin or tank in which liquid waste contained solids that settle and suspended matter are retained for removal by gravity.

(45) Seepage pit: A subsurface absorption devise which consists of a covered excavation no deeper than 4 feet with open-jointed walls through which effluent after primary treatment, may seep or leach into the surrounding soil.

(46) Septic tank: A watertight, accessible, covered receptacle which receives domestic wastewater from a building or facility sewer, allows solids to settle from the liquid, provides digestion for organic solids, stores digested solids through a period of retention, and allows clarified liquid to discharge to additional treatment works for final treatment and dispersal.

(47)Serial distribution: An arrangement of absorption trenches of beds which retains effluent in each component so as to utilize the total effective absorption area of each component before allowing the effluent to flow into a succeeding component.

(48) Shallow wastewater system: A type of absorption system that relies primarily upon evapotranspiration rather than percolation for final treatment of wastes.

(49) Soil horizon: A layer of soil or soil material approximately parallel to the land surface and differing from adjacent genetically related layers in physical, chemical, and biological properties or characteristics such as color, structure, texture, consistency and pH.

(50) Suitability soil: A soil which act as an effective filter in the removal or organisms and suspended solids before the effluent reach

any highly permeable earth formations such as joints in bedrock, gravels, or very coarse soils.

(51) Unconventional system: A system or device, such as a compost unit, vault privy, or chemical toilet, which receives and treats human excreta without the use of water as a transport medium.

(52) Vault privy: A structure which allows for disposal of human excreta into a watertight vault, provides privacy and shelter, and prevents access to the excreta by flies, rodents, and other animals.

(53) Water supply system: A system of pipes and other structures through which water is obtained and distributed for consumption from springs, wells and well structures, intakes and cribs, pumping stations, treatment plants, reservoirs, storage tanks, cisterns and related appurtenances.

(54) Water-carriage wastewater system: A system which transports wastes from buildings or other facilities hydraulically by the use of water in a piping system.

Section 102. Permit Required for Wastewater Treatment Systems

(a.) No on-site wastewater treatment system or any other system for the treatment or disposal of human excreta shall be installed, constructed, changed or operated within the unincorporated area of Minnehaha County without a permit therefore, issued by the Planning Director or authorized representative in conformance with this ordinance.

(b.) The installer of a wastewater system shall complete an application as provided by the Planning Director in order to determine compliance with the provisions of this ordinance. The signature of the installer shall be required on the application to verify the accuracy of the information and that the system will be installed in accordance with the permit. The application shall constitute a valid permit upon payment by the applicant of a $50.00 fee payable to the County Treasurer and upon the signature of the Planning Director or authorized representative. Governmental entities shall be exempt from the permit fee.

Sect ion 103. Review of plans and specifications prior to construction.

Plans and specifications for all installations which receive human excreta must be submitted to the Planning Director or authorized representative for review and approval prior to construction. The plans and specifications shall become part of the permit.

Seciton 104. Inspection of system required.

The installer of an on-site wastewater treatment system shall ensure

that all below ground components are inspected by the Planning Director or authorized representative prior to backfilling.

Section 105. Existing systems not affected by this chapter -- Exceptions

On-site wastewater systems existing prior to February 28, 1975, are not subject to this ordinance unless the systems are changed, the systems cause the ground water to become polluted, or the systems are allowing wastewater to surface. Abandoned wastewater systems are not exempt from this ordinance and shall be abandoned in accordance with Section 111.

Section 106. Existing subdivisions and developments exempted from lot size requirements--Proviso.

Housing subdivisions and housing developments platted before February 28, 1975, are exempt from the lot size requirements of Section 116 provided compliance with other provisions of this ordinance can be achieved.

Section 107. On-site wastewater systems to comply with rules.

All on-site wastewater systems designed for the reception and treatment of wastewater from premises including but not limited to dwellings, mobile home parks, commercial establishments, businesses, parks, and institutions where public wastewater collection and treatment systems are not available, constructed after February 28, 1975, shall be constructed, added to, and altered in accordance with this ordinance. No on-site wastewater system, regardless of when constructed may cause a violation of any existing water quality standard, cause a health hazard, or fail to meet the requirements of Section 109-113, inclusive.

Section 108. On- site wastewater systems prohibited when public wastewater systems are available.

No person may construct, install, or operate an on-site wastewater system where a public wastewater system is available. A public wastewater system is considered available to premises under the following circumstances:

(a) The structure or wastewater system is located within the jurisdictional boundaries of a sanitary district.

(b) The sewerage collection system of the public entity exists within 400 feet of the dwelling, mobile home park, commercial establishment, business or institution; and

The sanitary district requests to provide service to the premises.

Section 109. Wastewater to receive primary treatment prior to discharge to absorption system.

Wastewater shall pass through a septic tank, sedimentation tank, or aerobic system prior to discharge to an absorption system.

Section 110. Types of treatment available to wastewater systems.

An individual or small on-site wastewater system may use any of the following type of treatment:

(a) A conventional system consisting of a septic tank with a soil absorption system.

(b) An aerobic treatment unit utilizing a sedimentation process in conjunction with a soil absorption system.

A septic tank with an evapotranspiration, an evapotranspiration-absorption, a Nodak or mound system.

(d) A holding tank.

Ce) A septic tank with a gray water system.

Section 111. Abandoned systems to be disconnected, plugged, dismantled, removed, and filled.

Abandoned wastewater systems shall be disconnected from buildings or facilities, pipes plugged, and receptacles dismantled or removed; and any void space in which such receptacles were contained shall be filled with soil. Before filling, receptacle contents shall be pumped out and disposed of in accordance with Section 141.

Section 112. Wastewater not allowed to surface on ground or enter state waters--Exception.

No person may allow wastewater from an on-site system to be deposited upon the ground surface, nor may any person operate an on-site wastewater system which allows wastewater to surface upon the ground or enter any waters of the state. Gray-water systems are exempt from this requirement in locations where they will not create a public nuisance or enter any waters of the state.

Section 113. Wastewater not to be discharged into unused wells, gravel pits, or rock formations.

Wastewater, treated or untreated, shall not be discharged into any abandoned or unused well, nor shall it be discharged into any crevice, sinkhole, gravel pit, or naturally fissured rock formation, such as limestone.

Section 114. On-site wastewater treatment system design and type considerations.

The designer of each on-site wastewater treatment system must take into consideration the distance from any producing water well to the

proposed septic tank and absorption system, the slope of the site and the gradient from any producing water well to the wastewater treatment system, the seasonal high ground-water table, the percolation rate, the lot size, the type and maximum daily wastewater flow to be treated by the wastewater treatment system.

Section 115. Separation required above ground water or geological formations.

There shall be at least 4 feet of soil between an absorption bed, trench, or seepage pit bottom, the lowest construction joint on a septic tank, or any other component of a subsurface absorption system and the seasonal high ground-water table, ground-water table, rock formations, or impervious soil strata. Absorption systems shall not be constructed in soils rated as having severe or very severe limitations for underground dispersal by the Soil Conservation Service, U.S. Department of Agriculture, unless that limitation is not present as shown by field investigation.

Section 116. Minimum lot size required.

A water-carriage wastewater system may not be installed or operated on a lot which is smaller than 43,560 square feel (1 acre).

Section 117. Drainage not to enter wastewater systems.

Drainage and runoff from footings, roofs, and ground-water sump pumps shall be allowed to enter an on-site wastewater system. Absorption systems shall be located and designed so that surface runoff from drainage ways will not flow into or over the system. Absorptions systems shall not be located in flood plains.

Section 118. Cesspools and pit privies prohibited.

The construction of a cesspool or a pit privy is prohibited. The operation of a cesspool or a pit privy constructed after February 28, 1975, is prohibited.

Section 119. Distance between on-site wastewater system components and pertinent ground features.

All on-site wastewater system components shall be located and maintained in accordance with minimum distance requirements from pertinent ground and terrain features on or near the site of the system. The minimum required horizontal distances, in feel between system components and pertinent ground features are shown in Table 1 as follows:
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Table 1

Wastewater System Components	Ground and Terrain Features (A)	(B)	(D)	(E)	(F)	(G)
Septic tank, aerobic system, or holding tank	50	75	50	50	25	10	10
Absorption field, mount, evapotranspiration, seepage pit, or gray-water system	100	150	100	100	25	20	10
Sewer lines of tightly-jointed tile of equivalent material	50	75	50	50	10	0	0
Sewer lines -- materials, construction, and testing comply with AWWA standards for water mains	30	30	25	3	10	0	0
Unconventional systems	50	75	50	50	25	0	10

(A) = Wells over 100 feet deep.
(B) = Wells less than 100 feet deep, springs, or water suction lines.
(C.)= Cisterns or reservoirs.
(D) = High water line or lakes, streams, or impoundments (meandered or ordinary, whichever is higher).
(E) = Pressurized water lines.
(F) = Dwelling or occupied building.
(G) = Property line - all sides.

Section 120. Wastewater flow capacity requirements of residential and non-residential establishments.

All individual or small on-site wastewater treatment systems shall be designed to have a capacity at least equal to the anticipated maximum daily flow. For existing facilities where the average daily flow is measured, the anticipated maximum daily wastewater flow shall be assumed to be 150 percent of the average daily flow as the basis for the design of the system. In other cases, the anticipated maximum daily flow capacity shall be determined according to the type of facility as set forth in Table 2.

Table 2

	Maximum Daily Flow Gallons/Person/Day (*Gallons/Unit/Day)
Residential	
Boarding Houses (with food service)	50
Hotels and Motels (without private baths)	40
Hotels and Motels (with private baths)	50
Luxury Residences and Estates	150
Mobile Home Parks (minimum of 3.5 persons)	75
Mobile Home Parks (per space)	*250
Motels (with private baths and kitchenettes or laundry)	60
Multiple Family Dwellings or Apartments	75
Rooming Houses (rooms with baths)	40
Single Family Dwellings (minimum of 3.5 persons, or 120 gallons per bedroom, whichever is greater)	75
Commercial	
Airport (per passenger, without food service)	5
Airport (per public toilet room)	*500
Automobile Service Station (per toilet room)	*500
Automobile Service Station (per vehicle served)	*10
Bars and Cocktail Lounges (per patron)	2
Bars and Cocktail Lounges (per seat)	*20
Bus Stations (without food service)	5
Commercial Employees (except factory, plant or office)	10
Factories and Plants (exclusive of industrial waste)	35
Laundries, Self Service (per washer)	*600
Office (per employee)	15
Restaurants (kitchen wastes per patron)	3
Restaurants on Interstate or Through Highways (per seat)	*180
Restaurants (per seat)	*35
Restaurants (toilet and kitchen wastes per patron)	10
Restaurants (with paper service per patron)	1.5
Shopping Center (per parking space)	2
Stores (per public toilet room)	*500
Theaters, Drive-in (not including food, per car space)	*10
Theaters, Movie, Auditorium Type (not including food, per seat)	*5

Work or Construction Camps (semi-permanent, with flush toilets)	50
Work or Construction Camps (semi-permanent, without flush toilets)	25

Institutional

Hospitals (per bed space)	250
institutional and School Employees	15
Institutions other than Hospitals (per bed space)	125
Nursing or Rest Homes (per bed space)	100
Schools, Boarding	100
Schools, Day (without cafeteria, gym, or showers)	15
Schools, Day (with cafeteria, but not gym or showers)	20
Schools, Day (with cafeteria, gym, and showers)	25

Recreational, Seasonal or Other

Assembly or Dance Halls	2
Bowling Alleys (per lane)	*75
Bowling Alleys (with restaurant, per lane)	*100
Cabins, Resort	60
Campgrounds, Developed	30
Camps, Day (no meal served)	15
Camps, Luxury Resorts	125
Churches (per sanctuary seat)	*5
Churches (with kitchens, per sanctuary seat)	*7
Cottages and Small Dwellings (seasonal occupancy)	50
Country Clubs, Employees	15
Country Clubs (per guest)	25
Country Clubs (per resident member)	100
Interstate Rest Areas	5
Parks, Picnic (toilet waste only)	5
Parks, Picnic (with bath houses, showers, and flush toilets)	15
Parks, Travel Trailer (with individual water and sewer hook-ups, per space)	*100
Parks, Travel Trailer (without individual water and sewer hook-ups, per space)	*50
Parks (with central toilet and shower facilities, per space)	*75
Store, Resort	3
Swimming Pools with Bath Houses	10
Visitor Center	5

Section 121. Alternative method of determining wastewater flow capacity requirements for commercial or public service establishments.

In lieu of calculating the wastewater flow capacity required pursuant to Section 120, Table 3 may be used to determine wastewater flow capacity for specific commercial or public service

establishments when the amount of usage cannot be accurately determined. Flow projections expressed as gallons per day (gpd) shall be calculated by multiplying total floor area in square feet of the commercial or public service establishment by the statistical factor given in Table 3.

Table 3

Establishment	Statistical Factor
Banks	0.04
Barber Shops	0.20
Beauty Salons	0.20
Car Wash without Recycling Equipment	4.90
Department Store with Lunch Counter	0.08
Department Store without Lunch Counter	0.04
Drug Stores	0.13
Dry Goods Stores	0.05
Hotels	0.25
Laundries and Cleaners	0.31
Laundromats	3.68
Medical Office Buildings	0.62
Motels	0.23
Office Buildings	0.09
Retail Stores	0.05
Service Stations	0.18
Shopping Centers	0.18
Supermarkets	0.20
Warehouses	0.03

Section 122. Alternative method of determining wastewater flow capacity requirements for public parks and marina.

In lieu of calculating the wastewater flow capacity required pursuant to Section 120, Table 4 may be used to determine wastewater flow capacity for public parks and marina when the usage cannot be accurately determine. Flow projections, expressed as gallons per fixture per hour, are based on the related statistical flow figures per unit of plumbing fixture. To determine the flow capacity of the system, multiply the number of hours this facility is open by the flow figure for each fixture available as given in Table 4.

Table 4

Type of Fixture	Gallons/Hour
Faucets	15
Flush Toilets	35
Showers	100

Section 123. Design and construction requirements for septic tanks.

The minimum design and construction requirements for septic tanks are as follows:

(a) Septic tanks shall be watertight and constructed of durable materials designed to withstand expected physical loads. Such tanks shall be capable of supporting a static vertical load of at least 1000 pounds per square foot when bedded and backfilled to the top of the tank. The septic tank, including baffles or tees, shall be constructed of materials resistant to acid, decay, and corrosion. Prefabricated, coated metal tanks shall meet the requirements of the State plumbing code, 20:54:03:03. Coated metal tanks are not permitted for wastewater systems when the usage will be longer than seven years. Concrete septic tanks shall be constructed of Portland type II sulfate resistant cement with a minimum strength of 3000 pounds per square inch. The walls, floors, and covers of concrete septic tanks poured on-site shall be at least 3.5 inches thick with reinforcing bars and welded wire mesh. Fiberglass or plastic septic tanks shall have a minimum wall thickness of .25 inches. All special reinforced precast concrete, concrete block, plastic, or fiberglass septic tanks shall meet the minimum static vertical load requirements of 1000 pounds per square foot when bedded and backfilled to the top of the tank. The interior concrete block septic tanks cement sand plaster and shall have mortar joint. Septic tank keyways or construction joints shall be made watertight by grouting with cement or corrosion resistant sealants.

(B) Septic tanks larger than 3000 gallon capacity and fabricated as a single unit shall consist of two or more compartments, with 1.2 to 2.3 of the tank capacity in the

first compartment. The minimum dimension of any interior compartment shall be 2 feet. Each compartment shall have at least one access hole with a minimum dimension of 20 inches located within 6 feet of all walls of the tank. The access holes shall extend through the top of the tank to a point within 12 inches but not closer than 6 inches below finished grade, and the access hole covers shall be covered with at least 6 inches of earth unless the cover is airtight and equipped with a hasp and lock, in which case the cover may be shallower or above grade. If the access hole to the tank is covered with more than 12 inches of earth backfill, the access hole shall be extended to within 6 inches of the finished grade.

(c.) There shall be inspection pipes of at least 4 inches diameter over both the inlet and outlet devices. The inspection pipes shall extend through the top of the tank and be capped flush or above finished grade with a removable watertight cap or cover. A downward project of the center line of the inspection pipe shall be directly in line with the center line of the inlet or outlet device. The tank inlet and outlet devices shall consist of baffles or sanitary tees.

(d) The minimum dimension or diameter of septic tanks shall be 4 feet. The tank shall have a liquid depth of between 30 inches and 72 inches and shall have a uniform horizontal flow throughout its length.

(e) The inlet elevation shall be at least 3 inches higher than the outlet elevation of the tank. The outlet elevation shall be at least 9 inches beneath the underside of the top of the tank or 20 percent of the total liquid depth, whichever is greater. The inlet baffle or tee shall penetrate at least 6 inches, but not more than 20 percent of the total liquid depth below the liquid level in the tank and not lower than the outlet baffle or tee. The outlet baffle or tee shall penetrate at least 12 inches, but not more than 35 percent of the total liquid depth in horizontal cylindrical tanks or 40 percent of the total liquid depth in rectangular tanks, below the liquid level in the tank. The inlet and outlet baffle or tee devices shall extend above the liquid level at least 8 inches or to within approximately 1 inch of the underside of the tank top. At least 1 inch of vent space shall be provided between the baffle or tee devices and the underside of the top of the tank. The separation distance between the inlet or outlet opening at the tank wall to the nearest point on baffles or tees shall not be less than 6 inches nor more than 12 inches.

(f) When a partition wall is used to form a multi-compartment tank, the partition wall opening shall be not less than 4 inches in diameter and not smaller than the diameter of the

influent and effluent pipes. The opening shall be located at the same elevation as the effluent pipe with sanitary tees or baffles having the same size and location requirements as for the inlet and outlet devices. The top of the partition wall, including baffles or tees, shall be set at least 1 inch below the underside of the tank top to provide adequate venting. All partitions, tees, and baffles shall be permanently and securely attached to the tank.

(g) The effluent pipe exiting the unit shall be at least 6 feet in length and unperforated until the first tee, distribution box, or drop box before the absorption field is encountered.

Section 124. Installation requirements for septic tanks.

The installation requirements for septic tanks are as follows:

(a) Septic tanks shall be installed on a solid, level base, with access hole covers 6 inches to 12 inches below the finished grade. If the cover is airtight, equipped with a hasp, and kept locked to prevent unauthorized access, the cover may be shallower or above grade. The tank shall be installed at a depth that provides adequate gravity flow from the building or facility sewer which meets the requirements of the South Dakota State plumbing code, 20:54:11:09.

(b) The tank shall be installed on undisturbed soil. If over excavation occurs, it shall be backfilled with sand to the correct elevation and compacted. Back filling around the tank shall be accomplished in a manner to prevent settlement and to prevent undue stresses on the tank and to the inlet and outlet pipes.

When multiple tanks are used to obtain the required liquid volume capacity, the tanks shall be connected in series. The interconnecting pipes between tanks shall be at least 6 feet in length and unperforated. No more that 4 tanks in series are permitted to obtain the required liquid volume

capacity. The first tank shall not be smaller than any of the subsequent tanks in the series.

(d) All tanks shall be located in an area which is accessible for the pumping of their contents. There shall be no constructed building or facility of any kind covering any of the tanks.

(e) Flotation collars shall be used in areas with high ground water potential.

(f) The inlet and outlet pipes shall be made watertight by grouting with cement or corrosion-resistant sealants. The pipes shall be supported on the outside of the tank to prevent failures due
to settling. The pipes connecting

septic tanks installed in series shall be cast iron soil pipe of 4-inch minimum diameter.

(g) Any damage to the watertight coating or interior of a tank shall be repaired and tested by filling with water.

Section 125. Minimum capacities for septic tanks.

The minimum capacities for septic tanks serving individual or small on-site systems shall be determined as follows:

(a) All septic tanks receiving wastewater flows of 750 gallons per day or less shall have a minimum capacity of at least 1000 gallons of liquid before there will be an overflow into the septic tank outlet. When a housing unit or units served by a septic tank contains more than three bedrooms, each bedroom in excess of three shall require an additional 250-gallon increase in the capacity of the septic tank beyond the 1000 gallons. If a septic tank receives wastes from a garbage disposal, the overall capacity of the tank shall be increased by an additional 20 percent.

(b) Septic tanks servicing premises other than housing units or receiving wastewater flows of more than 750 gallons per day but equal to or less than 1500 gallons per day shall have a minimum liquid volume capacity to permit retention of incoming sewage at 150 percent of the average daily flow.

Septic tanks receiving wastewater flows greater than 1500 gallons per day shall have a minimum liquid volume capacity (V) equal to at least 1125 gallons plus 75 percent of the daily wastewater flow (Q), or $V = 1125 + 0.75Q$.

(d) Septic tanks serving premises where high amounts of oil or grease are anticipated shall be preceded by grease interceptors. Wastewater from garbage disposals may not be discharged to grease interceptors. Grease interceptors shall be 750 gallons. Constructions and installation of interceptors shall meet the requirements of chapter 20:54:06 of the State plumbing code.

Section 126. Requirements for holding tanks.

The requirements for holding tanks are as follows:

(A) The minimum liquid holding capacity shall be 1000 gallons or the wastewater flow generated over a period of 7 days, whichever is greater. There shall be no discharge of effluent from the tank.

(b) The tank shall be equipped with a high-water alarm positioned to allow at least 3 days of storage after the alarm is activated.

Holding tanks shall conform to the requirements for septic tanks under Section 123, inclusive, with the exception of outlet devices.

(d) Holding tanks shall be installed to meet the requirements for septic tanks under Section 123.

Section 127. Dosing or pressure systems required when absorption systems are large.

A dosing chamber shall be installed with a siphon or a pump when the total length of absorption lines exceeds 750 feet, the area of the absorption system exceeds 1200 square feet, the topography and location is such that any absorption line will exceed 100 feet in length, or it is necessary to elevate the wastewater effluent from the septic tank for discharge into a mound or absorption field. The dosing chamber shall be equipped with automatic siphon or pump with level control switches and an alarm system. All electrical components in the dosing chamber shall be waterproof and corrosion resistant. The alarm and electrical panel shall be located outside of the dosing chamber and shall be weatherproof. The total storage volume of the dosing chamber shall be such that the wastewater is discharged once every three to four hours. The dosing chamber shall be at least 30 inches in diameter and have a net capacity to dose 60 to 75 percent of the total volume of the absorption lines at one time. The siphon or pump for the dosing chamber shall be capable of maintaining a pressure of at least one pound per square inch at the outer ends of the absorption lines. The dosing chamber shall be vented but watertight and designed for ease of maintenance. Absorption fields exceeding 1000 feet in total length or 1800 square feet in area shall be divided into at least two equal sections with each section dosed alternately.

Section 128. Distribution of septic tank effluent to absorption fields.

The pretreated effluent from a septic tank shall be distributed to the absorption field using the following criteria:

(a) On relatively flat terrain where the elevation difference of the ground surface does not exceed 6 inches in any direction within the absorption field, the septic tank effluent may be directed to the absorption field through a system of interconnecting distribution pipes.

(b) On slightly sloping terrain where the elevation differences of the ground surface does not exceed 28 inches in any direction within the absorption field, the septic tank effluent maybe distributed by a distribution box provided the final ground surface elevation of the lowest trench is at least on foot higher than the invert elevation of the outlets of the distribution box. The inverts of all outlets shall be at the same elevation as measured from a liquid surface which is at least 4 inches above the distribution box

floor. The inlet pipe invert shall be at least 1 inch higher than outlet inverts. Each absorption line shall be connected separately to the distribution box and shall not be subdivided. When the septic tank effluent is pumped to the distribution box, either a baffle wall shall be installed in the distribution box or the pump discharge shall be directed against a wall of the box on which there is no outlet. The baffle shall be secured to the box and shall extend at least 1 inch above the crown of the inlet pipe. The distribution box shall be watertight with a removable cover, constructed of durable materials resistant to corrosion or decay and shall have sufficient capacity to handle the maximum daily flow rate; and

(c.) On sloping terrain where the elevation difference of the ground surface exceeds 28 inches in any direction within the absorption field, a serial distribution system shall be installed. The serial distribution system shall be connected with drop boxes or closed pipe relief lines in such a manner that each trench is completely filled with septic tank effluent to the full depth of the gravel before effluent flows to succeeding trenches. The drop boxes or relief lines shall be placed on an undisturbed section of ground. The first drop box or relief pipe arrangement encountered shall not have the crown of the outlet pipe at its highest point above the invert of the septic tank outlet. At each drop box or relief arrangement, the invert of the inlet pipe shall be between 1 and 2 inches higher than the invert of the outlet pipe to the succeeding trench. The slope of the trench between the invert of the outlet and the invert of the inlet of successive drop box or relief pipe arrangements shall be 1 inch per 100 feet. When septic effluent is delivered to the drop box by a pump, the pump discharge shall be directed against a baffle wall or against a wall of the box on which there is no outlet. The drop box shall be watertight with a removal cover, constructed or durable materials resistant to corrosion or decay, and shall have sufficient capacity to handle the maximum daily flow rate.

Section 129. Percolation tests required prior to approval and installation of absorption system.

The installer of a subsurface absorption system shall ensure that a percolation test is conducted in accordance with Section 130 before installation of any such system.

Section 130. Manner for conducting percolation test.

A soil percolation test shall be made in at least 3 test holes within 5 feet of where the proposed absorption system or shallow wastewater system is to be located. The holes shall be randomly located in soil representative of and similar in character to the rest of the area where the system will be placed. An additional test hole shall be made to a depth of 4 feet beneath the bottom of

absorption system, unless groundwater or bedrock is encountered first, to determine the type and depth of absorption system.

The horizontal dimension or diameter of the percolation test hole shall be from 6 to 12 inches and the vertical sides shall extend to the maximum depth of the proposed absorption system or to a depth of at least 30 inches, whichever is greater.

Test holes shall be located in unfrozen soil and shall be filled at least 50 percent full with water for at least 8 hours but not more than 16 hours before making the soil percolation test. Immediately before making the test, each hole shall be refilled with water to at least 50 percent of its volume. When the water reaches the lower 25 percent of the test hole, the test shall begin. The percolation rate of a test hole shall be expressed in the number of minutes it takes the water level to drop 1 inch. The percolation rate for the area where the subsurface infiltration system is desired is the average percolation rate of all the test hoes. The percolation tests shall be conducted for 2 hours unless the percolation rate is slower than 45 minutes per inch, in which case the percolation tests shall be run for at least 4 hours.

Section 131. Determining required absorption system area.

The minimum area of absorption beds or trenches in a water-carriage dispersal system which utilizes an absorption system shall be expressed in terms of square feet, that is, the length times the width of the beds or trenches. The total absorption area (A) in square feet required for absorption beds or trenches is equal to the number derived by multiplying the gallons per day of wastewater flow (Q) for which the system is designed by the square root of the rate of percolation, as determined pursuant to Section 130 expressed in minutes per inch (t) and dividing this product by five, as sown in the following formula:

$$A = Q \frac{t}{5}$$

In no case may the gallons per day of wastewater flow (Q) used in this formula be less than 750 or more than 7500. For systems receiving wastewater flows of less than 750 gallons per day, Table 5 in Section 132, shall be used based on 120 gallons per day per bedroom. This formula gives the required bottom area when 6 inches or more but less than 12 inches of fill material are placed below the distribution pipe for trenches and beds. The required bottom area may be reduced by the following percentages for trenches only: 20 percent for 12 inches or more but less than 18 inches of fill material below the distribution pipe; 34 percent for 18 inches or more but less than 24 inches of fill material below the distribution pipe; and 40 percent for 24 inches or more of fill material below the distribution pipe.

Section 132. Alternative method of determining required absorption trench system

In lieu of calculation the absorption trench system area according to Section 130 and 131, the following criteria in Table 5 may be used for the design of individual or small on-site wastewater systems if the absorption trench system is of an area sufficient for at least three bedrooms. The absorption area shall be determined according to the following table:

Table 5

Percolation Rate (Minutes for water to drop one inch)	Minimum Absorption Trench Area (Square feet of trench bottom per bedroom)
1 but less than 5 minutes per inch	125 square feet
5 but less than 10 minutes per inch	165 square feet
10 but less than 15 minutes per inch	200 square feet
15 but less than 30 minutes per inch	250 square feet
30 but less than 45 minutes per inch	300 square feet
45 but less than 55 minutes per inch	350 square feet
55 but no more than 60 minutes per inch	350 square feet
Over 60 minutes per inch	Not permitted -- See Section 133

The minimum absorption trench area, as shown in the above table, may be reduced in accordance with Section 131 when the depth of fill material below the distribution pipe is 12 inches or greater.

Section 133. Absorption or alternative system permitted under certain circumstances.

An absorption system or alternative water-carriage system may be used when the percolation rate as determined by Section 131 or 132 is between 5 and 60 minutes per inch if all other requirements for the absorption system or alternative water-carriage system are met. An alternative water-carriage system must be used when the percolation rate of the soil is slower than 60 minutes per inch or faster than 5 minutes for permit., An absorption system may be used where fill material is used to decrease the percolation rate from more than one but less than 5 minutes per inch to more than 5 but less than 60 minutes per inch.

Section 134. Seepage pits allowable.

A seepage pit is permissible at the end of an absorption system if the bottom of the pit is no more than 4 feet below the ground surface

and the requirements of Section 115, and either Section 131 to 132, are met.

Section 135. Requirements for an absorption trench.

An absorption system shall have at least 2 absorption trenches of approximately equal length. The length of a trench with gravity flow may not exceed 100 feet, the width 0+ a trench may not exceed 3 feet. The bottom of the trench shall be at least 18 inches below the ground surface, but the depth may not exceed 4 feet. The trench shall be constructed with a fill material consisting of washed gravel, crushed stone, slag, or clean bank run gravel ranging in size from 1/2 inch to 2 1/2 inches in diameter. An absorption line shall be placed within each trench and shall run along the length of the trench. All absorption lines shall have the ends capped. The fill material shall be at least 6 inches deep below the bottom of the absorption line and 2 inches deep above the top of the line. The bottom of the trench shall be uniformly graded to a slope from a minimum of 1/2 inch to a maximum of 4 inches per 100 feet. There shall be at least 6 of undisturbed soil between trenches. A closed-loop absorption trench system shall be level. To minimize sidewall compaction, trench excavation shall be made with bucket equipment having side cutters or raker teeth. When the soil does not exceed the plastic limit, the trench walls and bottoms shall be scarified before graded material is added

Section 136. Ri~uirements for an abSQrQtion bed.

Seepage beds may not be constructed where the soil percolation rate is 30 or more minutes per inch. An absorption bed may be designed and constructed for gravity or pressure flows in accordance with the following criteria

Ca) A gravity absorption bed system shall consist of a level bed not exceeding 100 feet in length, iS feet in width, and 3 feet in depth. Each distribution line shall extend the length of the bed and be spaced not greater than S feet on center across the bed width. The distribution lines shall be preceded by a distribution box to provide uniform distribution of effluent. The outermost distribution lines may not be closer than 30 inches to the bed walls and all ends shall be capped if it is not a closed-loop system.

Cb) A pressurized absorption bed system may exceed the length and width requirements in Section i36Ca), but must not be more than 3 feet in depth. The bed bottom shall be level. Each distribution line shall be installed within the perimeter limits of the bed and spaced not greater than

10 feet on center across the bed. The bed shall be center-fed by a manifold pipe. The outermost distribution lines may not be closer than S feet to the bed wall perimeter. The distribution system shall be closed-loop or have all ends capped.

(c.) Additional requirements for gravity and pressurized absorption bed systems are as follows:

(I) The distribution pipe network shall meet the requirements of Section 137(g).

(ii) The distribution lines shall be placed in at least a 12-inch layer of 1.2 inch to 1 ½ inch diameter washed gravel with at least 6 inches of gravel beneath and 2 inches of gravel above each line.

(iii) The gravel above the distribution line shall be covered with untreated building paper, then a 6 inch layer of loose marsh hay or straw, and then a top layer of 12 inches of soil over the entire bed. Flax straw may not be used.

Section 137. Requirements for a mound or evapotranspiration system.

(a) Prior to the approval of a mound or evapotranspiration system, the Secretary of the Department of Water and Natural Resources shall first grant approval.

(b) A mound or evapotranspiration system may be designed for gravity or pressure flows in accordance with the following criteria:

(I) Mound and evapotranspiration system shall not be constructed on site located in a floodplain. Mound systems shall not be constructed on sites located on bedrock or on soils with percolation rates of 120 or more minutes per inch below the sand layer of the mound. Mound or evapotranspiration systems may not be located on natural slopes exceeding 12 percent under any soil percolation rate conditions. When a mound or evapotranspiration system is located on a slope, no buildings, driveways, other surface or subsurface obstructions, or further construction is permitted within 30 feet of the system on the down gradient side while the system is be used. The system shall be located in open area with maximum available sunshine. The area surrounding the systems shall be graded to provide for diversion of surface runoff water.

(ii) The mound or evapotranspiration system may be constructed only upon undisturbed naturally occurring soils. The bottom of the system bed shall be excavated to a depth from 8 to 12 inches below the ground surface and shall be completely level. The system may be round or rectangular.

(iii) The mound system shall be constructed so that the minimum distance between the seasonal high groundwater table and the invert elevation of the distribution system is 4 feet.

and the requirements of Section 115, and either Section 131 to 132, are met.

Section 135. Requirements for an absorption trench.

An absorption system shall have at least 2 absorption trenches of approximately equal

(iv) The required bottom area of the bed shall be calculated on the basis of a recommended or design application rate with respect to the soil percolation rate. For mound systems receiving less than 1500 gallons of wastewater per day, an application rate of 0.6 gallons per square foot per day shall be used when the percolation rate is from 60 to 120 minutes per inch and an application rate of 0.83 gallons per square foot per day shall be used when the percolation rate is 3 or more but less than 60 minutes per inch. For mound systems receiving 1500 or more gallons of wastewater per day, the application design rate shall equal the soil percolation rate plus the seasonal evapotranspiration rate as shown in Table 6. For evapotranspiration systems, the application design rate is the seasonal evapotranspiration rate shown in Table 6 as follows:

Table 6
Evapotranspiration Rate

Season of Use	Gallons per square foot per day
Year Around	0.12
Summer	0.20
Winter	0.06

Soil Infiltration Rate

Percolation Time, Minutes per Inch	Gallons per square foot per day
5 or more but less than 10	0.65
10 or more but less than 15	0.60
15 or more but less than 20	0.54
20 or more but less than 30	0.49
30 or more but less than 45	0.42
45 or more but less than 60	0.34
60 or more but less than 90	0.27
90 or more but less than 120	0.18
120	0.12

(e) The fill material for the interior portion of a mound or evapotranspiration system shall consist of sandy loam soil, medium-size pit run sand, and pea rock or washed gravel ranging in size from ½ to 2 ½ inch diameter. The first layer of fill material placed on the excavated bed bottom shall

be a minimum 12 inches of sand. The net layer of fill material shall consist of at least 9 inches of the pea rock or washed gravel placed in the immediate area on which the distribution pipe system will be placed. After placement of the distribution pipe system, additional pea rock or washed gravel shall be added until there are at least 2 inches of cover over and around the entire pipe system.

The rock or gravel layer shall be covered with untreated building paper. The finish fill shall consist of sandy loam soil placed on the untreated building paper to a depth of 1 foot in the center of the mound and to a depth of 6 inches at the sides tapered out onto the side of the sand filled layer.

(f) The exterior portion of mound shall consist of at least a 6 inch layer of loose marsh hay or straw over the sandy loam soil, covered with at least 6 inches of topsoil. Flax straw shall not be used. The outside slopes shall not be steeper than 3 feet horizontally to 1 foot vertically (3:1). Where the terrain slopes more than 7 percent, the downward slopes may not be steeper than 5 feet horizontally to 1 foot vertically (5:1). The entire system shall be seeded, sodded, or otherwise provided with a grass cover. No shrubs, trees, or other wood vegetation may be planted on the top of the system.

(g) The distribution pipe network for an elevated mound or evapotranspiration system shall consist of a dosing chamber, pump or siphon, 1 1/4 inch to 3 inch diameter flexible plastic pipe from the dosing chamber to the mound, and a manifold connected to the perforated distribution pipe. The distribution lines shall be installed in accordance with Section 136(b). The pipe from the dosing chamber to the center of the mound shall be installed below the frost line or be sloped uniformly back to the dosing chambers. The dosing or pressure system shall be constructed in accordance with Section 127. The distribution lines shall have perforations spaced from 2 to 7 feet along the pipe with varying hole diameters from 3/16 inch to ½ inch to provide uniform pressure and distribution over the bed. All drilled holes shall have burrs removed. All distribution pipe ends shall be capped. For gravity flow systems, all distribution pipes shall be at least 4 inches in diameter and spaced not greater than 5 feet on center across the bed width or closer than 30 inches to the bed was perimeter; and

(h) Livestock and heavy equipment shall not be allowed on the bed.

Section 138. Requirements for gray water system.

A gray water system shall be designed in accordance with the following criteria:

(a) All gray water treatment and recycle systems shall be located in accordance with the distances specified in Section 119, Table 1.

(b) Design of gray water systems for homes or cabins shall be based on a minimum gray water flow of 25 gallons per day per person. Three days retention time shall be provides for each gray

water tank. For other facilities, the design flow shall

be specified on a case by case basis by the Secretary of the Department of Water and Natural Resources.

(c.) Gray water tanks are septic tanks and shall conform to the requirements of septic tanks as specified in Section 123.

(d) Effluent from gray water systems may be recycled for toilet use, conveyed to absorption fields, mounds, or seepage pits, or used for irrigation of lawns and areas not intended for food production. Percolation tests shall be conducted and the minimum size of absorption area shall be determined in accordance with Section 129 to 132.

Section 139. Requirements for vault privies.

Vault privies shall be constructed to include a fly-tight vault; a superstructure affording complete privacy; an earth mound around the top of the vault and below the floor level, which slopes downward away from the vault; a floor and riser of reinforced concrete at least four inches in thickness or other impervious material; and a hinged, self-closing, fly-proof seat an lid of easily cleanable impervious material. All venting shall be fly-proofed with no.16 or smaller mesh screening. The vault shall be located in an area which is accessible for the removal of its contents. The vaults shall be durable and have corrosion-resistant material on the interior and exterior.

Section 140. Unconventional systems.

An unconventional system shall be issued a permit only after approval has been granted by the Secretary of the Department of Water and Natural Resources.

Section 141. Disposal of wastewater, sludge, or human excreta.

The disposal of wastewater, sludge, or human excreta shall be handled in the following manner:

(a) Septic tank, holding tank, and privy contents shall be discharged in a manner that eliminated all possibility of pollution from entering any well, water-bearing strata, or surface water supply and that prevents the creation of a nuisance or menace to the health of any person. No part of the contents of a privy, holding tank, or septic tank may be discharged onto the surface of the ground or into any water of the State, nor shall it be transported in an unsanitary manner.

(b) Disposal of the contents pumped from septic tanks, privies, or holding tanks shall not be deposited on the land, buried or injected into the surface of the earth except as described in Section 141(c).

(c.) Disposal shall be according to South Dakota Department of Water and natural Resources Septic Disposal Guidelines (Revised, 1989 or subsequent revisions) by one of the following methods:

(I) Incorporation of treated human waste into tillable soil.

1. Initial disposal of septage on frozen soil shall not exceed 1000 gallons/40 acre parcel to be tilled as soon as soil conditions permit.

(ii) Injection into a public wastewater system.

(iii) injection of untreated human waste, including but not limited to contents from privies or holding tanks, into a public wastewater treatment system.

(iv) Variance.

1. In the event that a variance allows spreading septage on frozen ground, the criteria shall be within the South Dakota Department of Water and Natural Resources Septic Disposal Guidelines except that surface application rate shall not exceed 7000 gallons/acre/year.

The rate of application for incorporation shall not exceed 15,000 gallons per acre per year during the time when weather permits the land to be filled.

Section 142. Inspections.

Inspection of the installation, equipment, and operation of any on-site wastewater system may be made at any time by the Planning Director or authorized representative.

Section 143. Protection of potable water supply.

No connection may be made at any time between a tap or outlet furnishing potable water on any premises and a container or equipment holding wastewater by any mans other than an open connection or back siphonage protection.

Section 144. Variances.

Variances to this ordinance shall be made only by the Secretary of the Department of Water and Natural Resources and the Planning Director or authorized representatives thereof.

Section 145. Penalty for failure to secure permit for on-site wastewater treatment system.

Any person installing an on-site wastewater treatment system without a permit as required under the provisions of this ordinance may be

subject to a maximum penalty of $1,000.00 per day and any other penalty presented by SDCL 34A-2-76 up to $10,000.00 per day of violation, or for damages to the environment of this State, or both. Each violation of this ordinance is deemed to be separate and is punishable as such.

Section 146. General Repealer.

All ordinances and parts of ordinances in conflict herewith are hereby repealed.

Section 147. Severability.

If any provision of this ordinance shall be held invalid, it shall not affect any other provisions of this ordinance that can be given effect without the invalid provision, and for this purpose, the provisions of this ordinance are hereby declared to be severable.

Section 148. Construction and effect.

No on-site wastewater treatment system in place before this ordinance took effect and no right accrued thereby are affected by the provisions of this Ordinance, but any subsequent use, modification application thereafter, must conform to the requirements of this ordinance consistent with State Law as far as applicable.

Approved this 14th day of February,
1989

BOARD OF COUNTY COMMISSIONERS

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ATTEST:

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Donna Thoms, Auditor

ORDINANCE MC 13-1-89

AN ORDINANCE AMENDING ORDINANCE MC 13-89 PROVIDING FOR THE CONTROL AND REGULATION OF ON-SITE WASTEWATER TREATMENT SYSTEMS.

BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF MINNEHAHA COUNTY:

That Section 102, (a) be amended by adding the following sentence:

Where approval is also required by the State Department of Water and Natural Resources and where such approval is not granted in a reasonable time, as is necessary to the permittee; then the Planning Director or authorized County representative is empowered to issue the permit conditional upon State approval.

That Section 102, (b) be amended to read as follows:

The installer or installer's representative of a wastewater system shall complete an application as provided by the Planning Director in order to determine compliance with the provisions of this ordinance. The signature of the installer shall be required on the application to verify the accuracy of the information and that the system will be installed in accordance with the permit. The application shall become a valid permit upon the signature of the Planning Director or authorized representative and upon payment by the applicant of a fee payable to the County Treasurer as outlined below:

Routine maintenance and repair:	$15.00
Installation of holding tank:	$15.00
Extension of existing grainfield when	
percolation test is required:	$50.00
percolation test is not required:	$25.00
New or replaced system:	$50.00

Governmental entities shall be exempt from the permit fee.

Approved this 9th day of May, 1989

BOARD OF COUNTY COMMISSIONERS

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ATTEST:

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Donna Thoms, County Auditor

ORDINANCE MC 13-2-91

AN ORDINANCE AMENDING ORDINANCE MC 13-89 FOR THE REGULATION OF ON-SITE WASTEWATER TREATMENT SYSTEMS.

BE IT ORDAINED BY MINNEHAHA COUNTY AS FOLLOWS:

That Section 145 be amended to read as follows:

Section 145. Penalty for violation of this ordinance.

Any person who violates any provision of this ordinance may be subject to a maximum penalty of 30 days in jail, a $100 dollar fine, or both. In addition, any person who violates any provision of this ordinance may be subject to civil penalties as set forth in SDCL 34A-2.

Approved this 9th day of April, 1991

BOARD OF COUNTY COMMISSIONERS

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ATTEST:

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Sue Roust, County Auditor

ORDINANCE MC 13-3-91

AN ORDINANCE AMENDING ORDINANCE MC 13-89 PROVIDING FOR THE REGULATION OF ON-SITE WASTEWATER TREATMENT SYSTEMS.

BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF MINNEHAHA COUNTY:

That Section 133. be amended by adding the following sentence:

When fill material is to be used un such a manner, the plans for the fill project shall be prepared by an engineer licensed in the State of South Dakota.

That Section 134. be amended to read as follows:

A seepage pit is permissible at the end of an absorption system if the bottom of the pit is not more than 4 feet below the ground surface and the requirements of Section 115, and either Section 131 or 132, are met.

That a new section be added as follows:

Section 149. Water source protection overlay districts.

New and replacement on-site wastewater disposal systems located in a water source protection overlay zoning district shall be of mound type construction. New innovative technologies may be considered when complete engineering plans are provided with the permit application and the plans have state approval as specified in Section 140.

(a) All mound systems shall have a pressure distribution system to better ensure uniform distribution of the effluent within the mound.

(b) A complete design plan for the mound shall be filed with the permit application.

Approved this 20th day of August, 1991

BOARD OF COUNTY COMMISSIONERS

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ATTEST:

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Sue Roust, County Auditor